

case of plants its importance varies with the species or individuals concerned. If during the course of any research temperature factors are suspected, Maps 1 and 2 should be used in order to assess the significance of the temperature limits given. If none of these is satisfactory, new maps should be constructed for other temperatures which may be more relevant.

It often happens that feeding or mating conditions are so affected by temperature that animals migrate in order to find optimum conditions. Map 3 provides a useful instrument for the study of these migrations, because it shows the normal month of the year when temperate conditions prevail. The temperature of 18° C. (64.4° F.) has been taken as an example, and the advance of this temperature from south to north has been mapped. The map can also be interpreted as showing the time of the year when similar temperature conditions prevail at different places. Thus July temperature conditions at Onslow are equivalent to May temperature conditions at Carnarvon and April conditions at Perth. The retreat of the same temperature southwards is shown in Map 4. In addition, the march of other temperatures may be significant, and similar maps could be compiled.

Temperature maps of the more usual type, showing average temperatures for various months and for the year, and annual and daily temperature ranges, are already available in the author's volume on "Australian Climates and Resources" (1947) and need not be repeated here.

(To be continued).

## FROM FIELD AND STUDY

**Growth of the Blackboy.**—When I was young (10 years of age) one of the games of my mates and myself was to "ride" certain of the blackboys (*Xanthorrhoea preissii*) outside the school. We broke all the "rushes" off and made the heads smooth and round, using them as perches to sit on. We broke up for a fortnight's vacation and during that time the "rushes" grew rapidly, in the case of my own "mount" by about 5 inches. Blackboys eaten down by kangaroos or other animals grow a complete new head in a year. This may be seen in any virgin bush.

—W. H. BUTLER, East Perth.

**Hérons at Bunbury.**—Adjacent to the beach at South Bunbury is a depressed area of about ten acres. During the winter rains this is converted into a miniature lake with a surrounding boggy swamp. It is favoured always by pairs or family parties of the local White-faced Heron (*Notophoxyx novae-hollandiae*) and as the rains diminish and the pool contracts these birds are joined by pairs of the Pacific Heron (*N. pacifica*). This year (1947) I noticed on frequent occasions a pair of the Nankeen Night Heron (*Nycticorax caledonicus*). I took a field-glass with me and they proved to be the adults, with unspotted plumage. Last but certainly not least, was a distinguished visitor in a very fine individual of the large pure-white Egret (*Egretta alba*).